Powered by **LabVIEW**™

□□□□□□□□□□□□□□□

ELG-10/ELG-47□□□□□

2013/11/09

□663-8112 □□□ □□□ □□□□□□ 2-2-801

TEL□0798-24-6601 FAX□0798-51-9345

URL□http://www.als-ci.co.jp/

Mail□kasai@als-ci.co.jp

LabVIEW□ National Instruments Corporation□ Trademark□□□

Copyright 2013 National Instruments Corporation. All Right Reserved.

Copyright 2005-2013 ALS-CI Co., Ltd. All Right Reserved.

USB

USB

AC

USB DC

±30V (Single End/

) ±10V

…… 1
…… 1
Excel LabVIEW …… 3
…… 3
. OS Vist/7/8 …… 3
. OS XP …… 4
Excel …… 6
…… 8
. …… 8
. …… 8
. …… 8
. …… 8
…… 8
. …… 8
. . …… 8
. . …… 9
. . …… 9
. . Digital Trig1 …… 9
. . Digital Trig2 …… 9
. . …… 10
. / …… 10
. . …… 10
. . …… 10
. . …… 11
. …… 11
. …… 11
. …… 11
. . Ch On/Off …… 11
. . …… 11
…… 11
Excel …… 12
. / Excel Sheet …… 12
. Excel …… 12
. …… 12
. …… 12
10 …… 13
11 …… 14

□□□□□□□□□□□

□□USB Excel□□□□□□□ELG-10□□□ELG-47□□□□□□□□□ 8Ch□□□□□□□ 4Ch□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□Excel□□□□□□□□□□□□□□□Excel□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

□□National Instruments□□□□□□□□□□□□□□□LabVIEW□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

□□　□Windows XP□Windows Vista, Windows 7 (32bit□ 64bit)

□□□□XP□Celeron 1GHz□□□Vist/7/8□Celeron 2GHz□□

□□□□XP:512MB□□, Vist/7/8:1GB□□

□□□□□□□□2MB□Runtime□□□□□(XP□766MB□Vist/7/8□720MB)

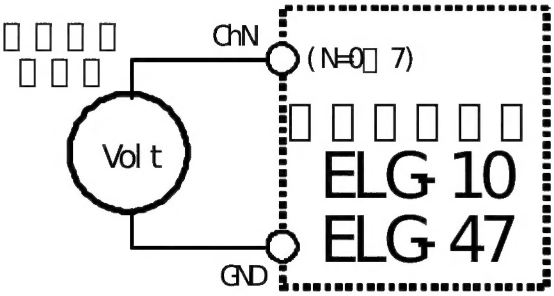
□□□□□□□1024×768□□

□□□□□□□□□USB 1.1□□

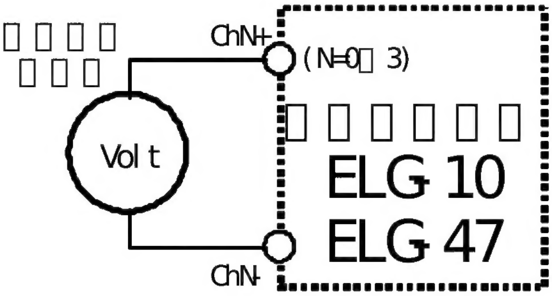
□□□□□□□□□□□□□□

□□□□□□□ELG-10□□□ELG-47□□□□□□□□□□□□□□□

□□□□□□□ELG-10□□□ELG-47□□□□□□□□□□□□□□□□□□□□□(Ch0□Ch7)□□□□□□□□□□□□□□□□□□□(Ch0□Ch3)□□□□□□□□



□□□□□□□□□□□□



□□□□□□□

□□□□□□□□□□□□□□□□□□□□□□□□S/N□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□S/N□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□±1□±20V□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□±10V□□□□□□□□
□□□□□□□□□□□□□□□16□□Analog□□□□□□□□□□□□□□□□
Digital□□□□□□□□□□Digital□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□2-1□□□□□□□□□□□

□ 2-1 □□□□□

	pin□□	Single End□□□		□□□□□	
		□□	□□□□□□	□□	□□□□□□
Analog □□□	1pin	GND		GND	
	2pin	Ch0□□(*1)	±10V	Ch0□□□	±20V(*2)
	3pin	Ch4□□(*1)	±10V	Ch0□□□	
	4pin	GND		GND	
	5pin	Ch1□□(*1)	±10V	Ch1□□□	±20V(*2)
	6pin	Ch5□□(*1)	±10V	Ch1□□□	
	7pin	GND		GND	
	8pin	Ch2□□(*1)	±10V	Ch2□□□	±20V(*2)
	9pin	Ch6□□(*1)	±10V	Ch2□□□	
	10pin	GND		GND	
	11pin	Ch3□□(*1)	±10V	Ch3□□□	±20V(*2)
	12pin	Ch7□□(*1)	±10V	Ch3□□□	
	13pin	GND		GND	
	16pin	GND		GND	
Digital □□□	29pin(PFI 0)	Digital Trigger □□ (TTL□□□)			
	30pin	□2.5V□□□□□□□			
	32pin	GND			

(□□□□□□□□□□□□ pin□□□□□□□□□□□□□)

(*1)□ Ch□□□□□ Open□□□□□□□□□□□□□□□□□□Open Ch□□□□ 1.4V□
□□□□□□□□□□□□□□□□□□□□□□□□□□Ch□ GND□□□□□□□□□

(*2)□□□□□□□□□□□□□□±10V□□□□□

[illegible]Excel[illegible]LabVIEW[illegible]

(1)[illegible]CD-ROM[illegible]

(2)[illegible]CD-ROM[illegible]OS[illegible]XP[illegible]Vista78[illegible]Installer[illegible]setup.exe[illegible]OS[illegible]Vist/7/8[illegible](A)[illegible]

(3)ELG-10(or ELG-47)[illegible]

(3-1)[illegible](N)>>[illegible]

(3-2)[illegible]ELG-10(47)[illegible]National Instruments[illegible](N)>>[illegible]C:¥Elg10(47)[illegible]Elg10(47).exe[illegible]

OS[illegible]Vist/7/8[illegible]Program Files[illegible]

(3-3)NATIONAL INSTRUMENTS[illegible](N)>>[illegible]

(3-4)[illegible](N)>>[illegible]

[illegible]LabVIEW[illegible]Runtime Routine[illegible]

(4)[illegible](F)[illegible](R)[illegible]

(5)[illegible]Elg10(47)[illegible] [illegible]

[illegible]

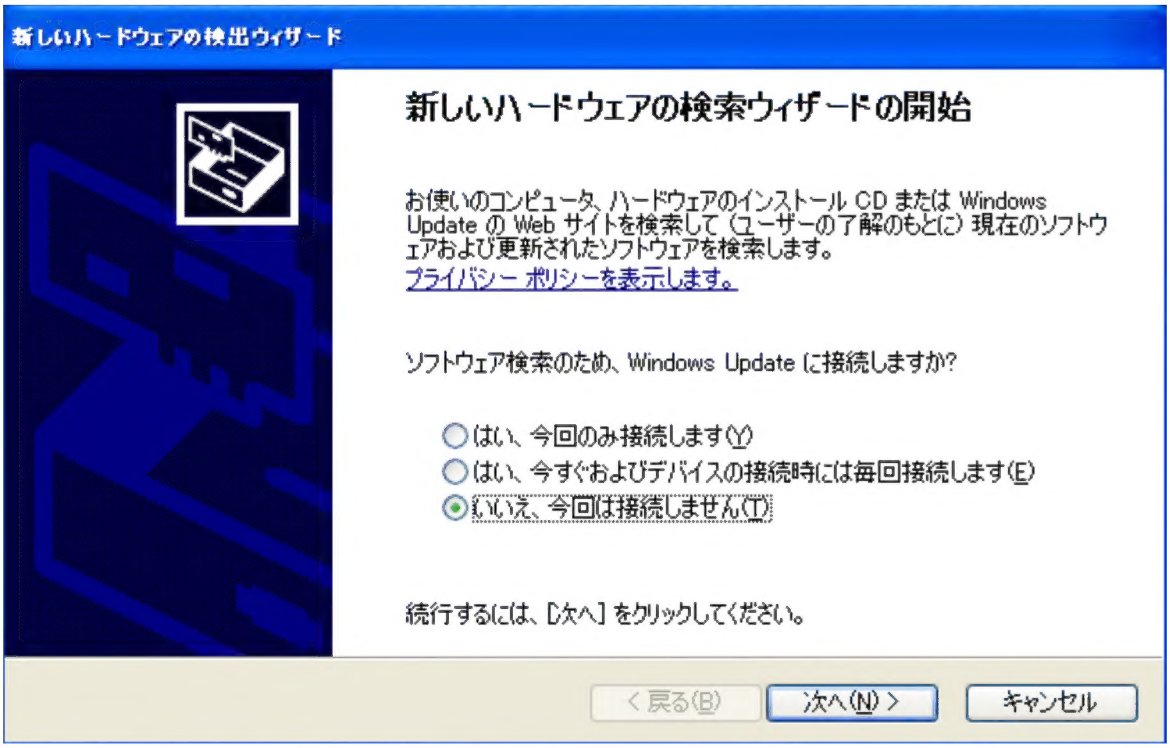
USB[illegible]USB[illegible]

[illegible].[illegible] OS[illegible]Vist/7/8[illegible]

OS[illegible]Vist/7/8[illegible]OK[illegible]

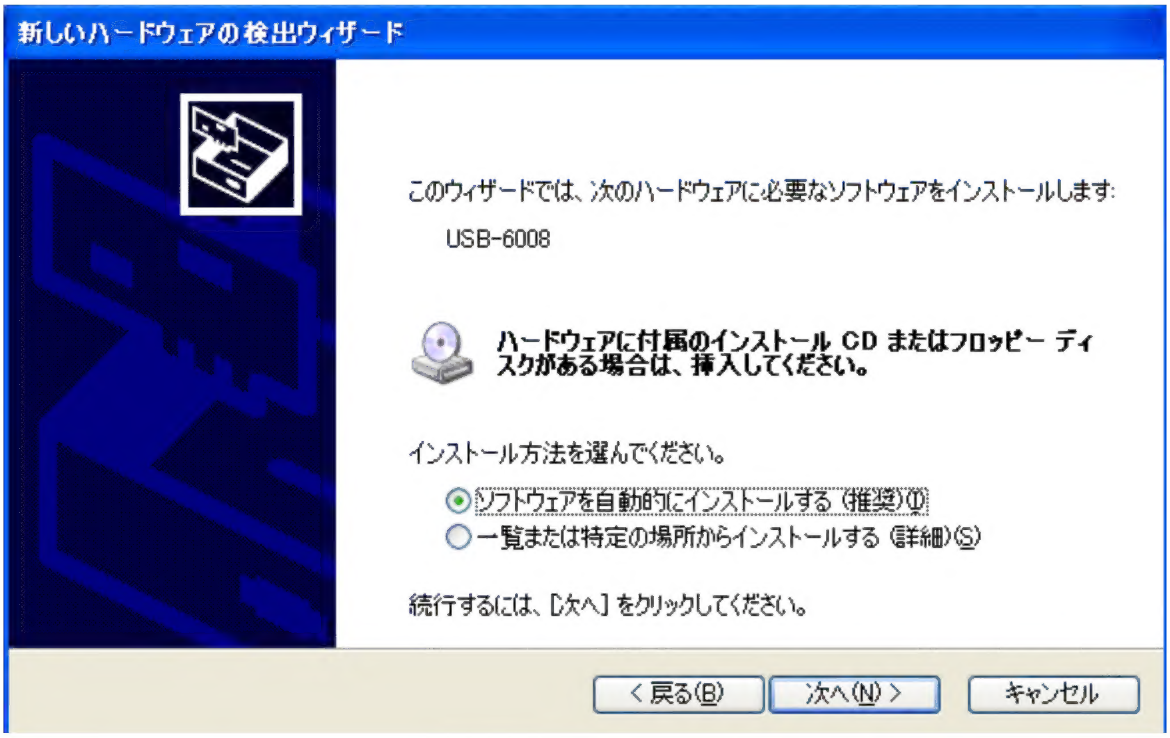
□.□ OS□XP□□□

(1)□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

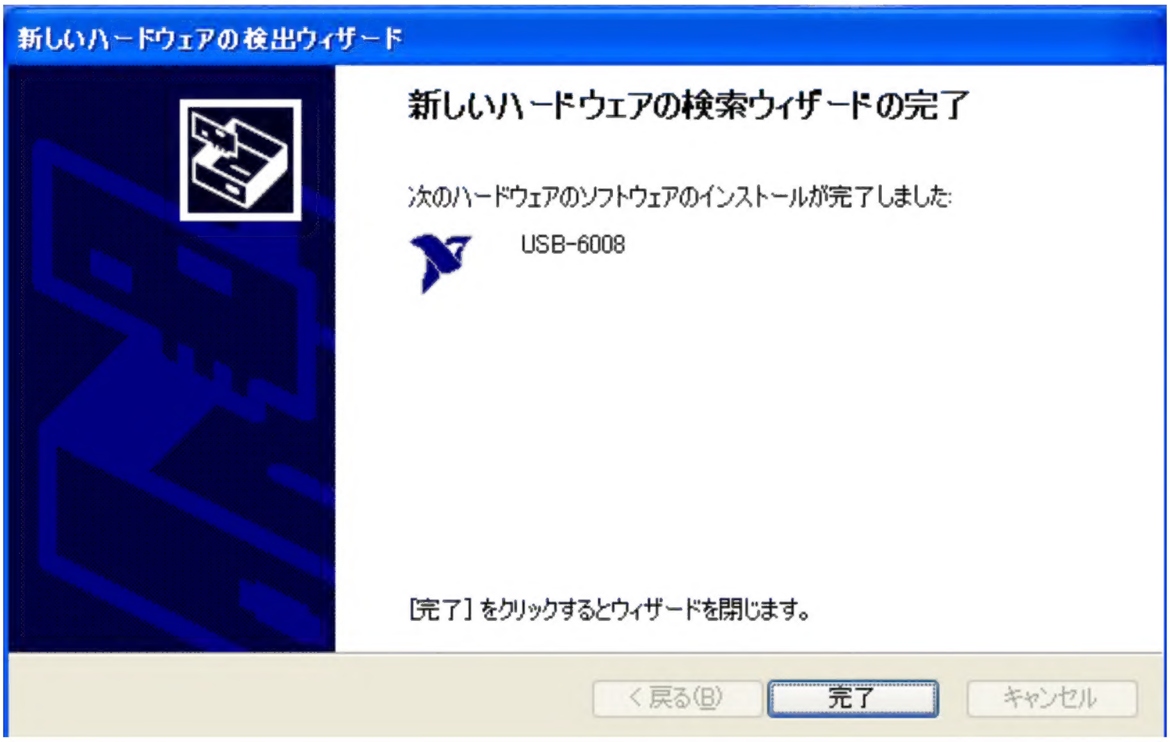


□□□□□□□□□□□□□□(T)□□□□□□□□(N)>□□□□□□□

(2)□ELG-10□□□□□□□□□□□ USB-6008 (□ELG-47□□□□ USB-6009)□□□□□□
□□□□□□□□□□□□□□□□□□(N)>□□□□□□□

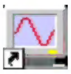


(3) [illegible]...[illegible]

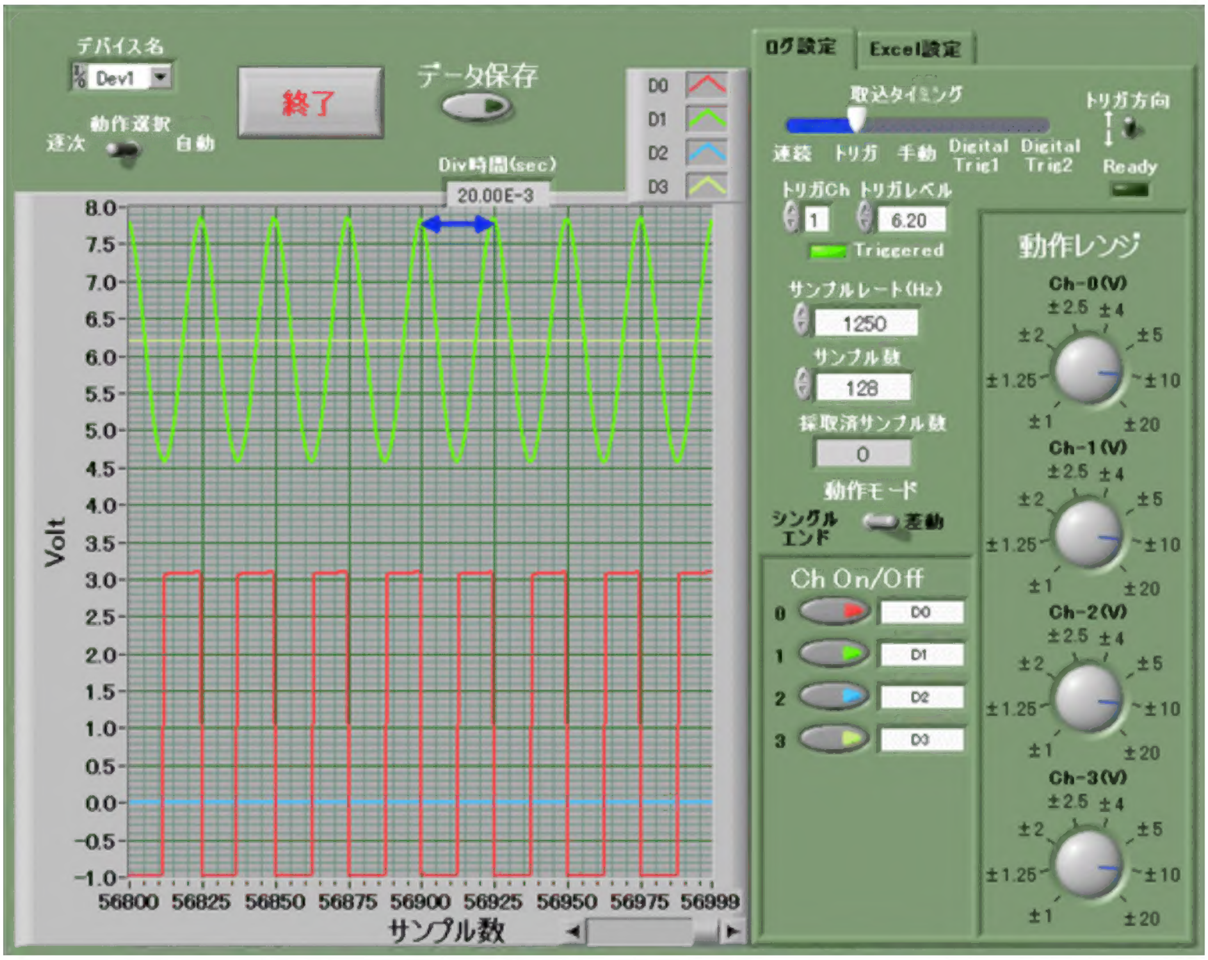

新しいハードウェアの検出ウィザード
新しいハードウェアの検索ウィザードの完了
次のハードウェアのソフトウェアのインストールが完了しました:
USB-6008
[完了] をクリックするとウィザードを閉じます。
< 戻る(B)
完了
キャンセル

(4) [illegible] OK [illegible]

□□Excel□□□□□□□□□□□□□□□□□

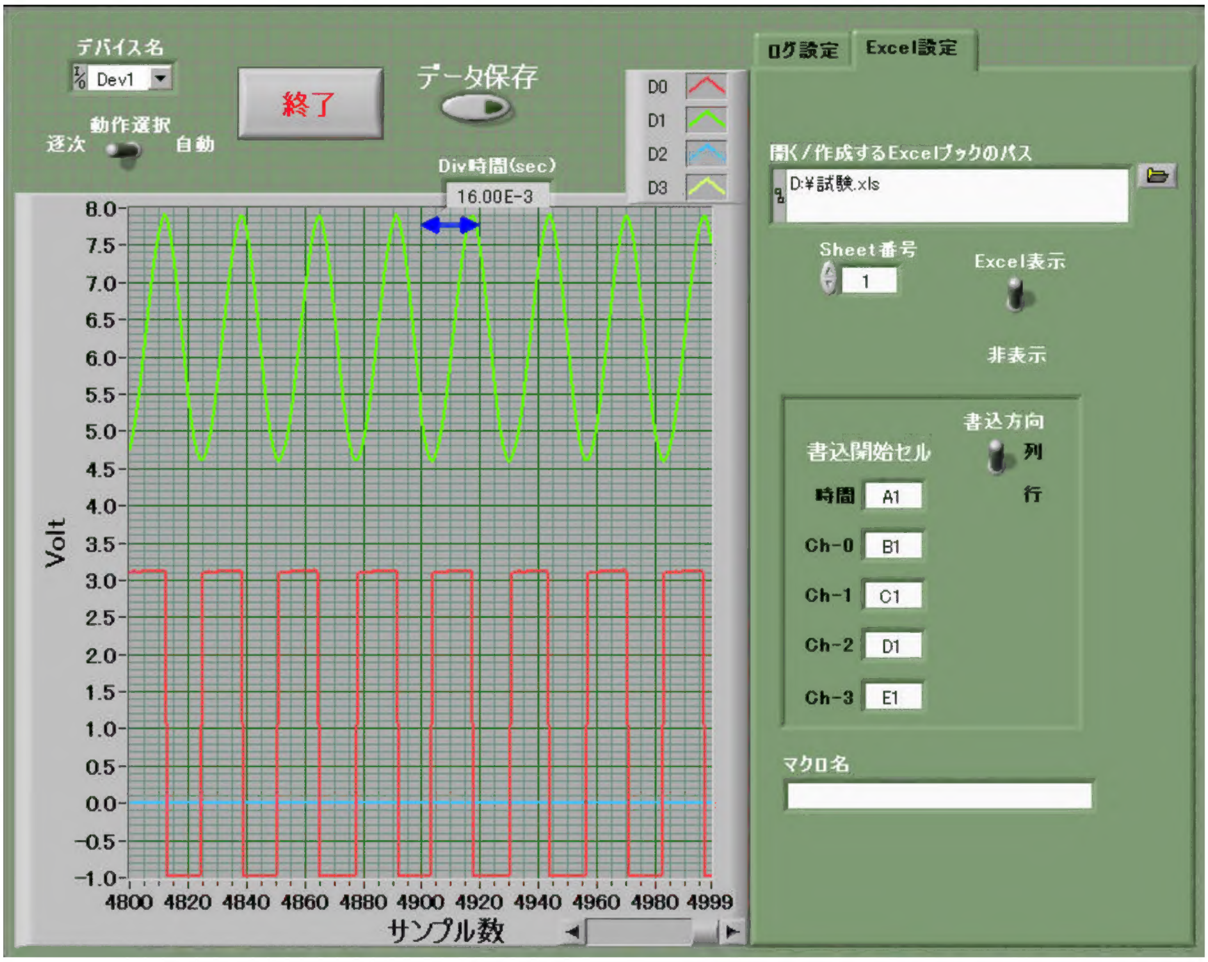
USB□□□□□□□□□□□□□□□□□□□□□□□□□□Elg10(47)□□□□ 
□□□□□□□□□□□□□□□□□□C:¥Elg10(47)□□□□□□□□Elg10(47).exe□□
□□□□□□□□□□□□□□□□□□ 5-1□□□□□□□□□

□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□Excel□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□ 5-1□□□□□□□□□□□□□□□□□□□□□□□□



□ 5-1 □□□□□□□□□□□(□□□□□□□)

□ 5-2□□Excel□□□□□□□□□□□□□□



□ 5-2 □Excel □□□□□(□□□□□□□)

□□□□□□□□□□□□□□□LabVIEW□□□(□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□)

(1)□□□

(2)□□□□□□□□□□□ □□□□□□□□□□□□

(3)□□□□□□□□□□□□□□□□□□□□□□

(3-1)□□□

(3-2)□□□□□UP/DOWN□□□□□□□□□□□□□□□□□□□□□□□□□ Up/Down□□□□□□□□□□□□□□□□□□□□□□□□□□□□□Up/Down □□□□□□□□□□□□□□□

(3-3)□□□□□□Up↑□Down↓□□□□□□□□□□□□□□□□□□Up/Down□□ □□□□□□□□□□□□□□□□□□□□□□□□□□□Up/Down□□□□□□ □□□□□□□□□←→□□□□□□□□□

(4)□□□□□□□Excel□□□□□□□□□□□□□□□□□□□□□□□□□□□□

[illegible]

[illegible]

[illegible]

[illegible] Dev1 [illegible]
N [illegible] ([illegible]) [illegible]
[illegible] Dev1 [illegible] 11 [illegible]

[illegible]

[illegible]

[illegible]

(1) [illegible]
(2) [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Free Run [illegible]

[illegible].[illegible].[illegible] [illegible]

[illegible]

[illegible] Ch [illegible] Triggered [illegible]

[illegible] Ch [illegible]

[illegible] Triggered [illegible]

[illegible]

[illegible].[illegible].[illegible] [illegible]

[illegible] Free Run [illegible]

[illegible]

[illegible].[illegible].[illegible] Digital Trig1 [illegible]

[illegible] Digital Trig1 [illegible] Digital Trigger [illegible] Ready [illegible]

[illegible] Digital Trigger [illegible] Ready [illegible]

[illegible]

(NOTE) [illegible] Digital Trig1 [illegible]

[illegible] × [illegible]

[illegible].[illegible].[illegible] Digital Trig2 [illegible]

[illegible] Digital Trig2 [illegible] Digital Trigger [illegible] Ready [illegible]

[illegible] Digital Trigger [illegible] Ready [illegible] Ready [illegible] Digital Trigger [illegible]

[illegible]

[illegible]

(NOTE) [illegible] Digital Trig2 [illegible]

[illegible]

[illegible] Digital Trig2 [illegible]

[illegible] × [illegible]

[illegible]

[illegible] . [illegible] . [illegible] [illegible]

[illegible] Digital Trig1/ Trig2 [illegible]

(NOTE) [illegible] Digital Trig1/Trig2 [illegible]

[illegible] Digital Trig1/Trig2 [illegible]

[illegible] . [illegible] [illegible]/[illegible]

[illegible] . [illegible] . [illegible] [illegible]

(1) [illegible] (Hz) [illegible] UP/DOWN [illegible]

[illegible] ELG-10 [illegible] 0.01Hz [illegible] 10kHz [illegible] ELG-47 [illegible] 0.01Hz [illegible] 47kHz [illegible]

[illegible] (Hz) [illegible] 10kHz(or 47kHz) ÷ ([illegible]) [illegible] (7.1)

[illegible] (7.1) [illegible]

(2) [illegible] Digital Trig2 [illegible]

[illegible] . [illegible] . [illegible] [illegible]

[illegible] UP/DOWN [illegible]

[illegible] 65536 [illegible]

[illegible].[illegible].[illegible] [illegible]

[illegible] Excel [illegible]

[illegible].[illegible] [illegible]

[illegible]

[illegible].[illegible] [illegible]

[illegible].[illegible].[illegible] [illegible]Ch On/Off[illegible]

[illegible]0[illegible]3[illegible]0[illegible]7[illegible]Ch On/Off[illegible] On [illegible]

[illegible].[illegible].[illegible] [illegible]

[illegible]D0[illegible]D3[illegible]S0[illegible]S7[illegible]

[illegible].[illegible] [illegible]

[illegible],[illegible] A/D [illegible]

[illegible]±10V[illegible]

[illegible]

(1)[illegible]200[illegible]

(2)X[illegible]

(3)[illegible]1024[illegible]

□□□Excel□□□□□□

□Excel□□□□□□□□□□□□□□□□□□Excel□□□□□□□□□□□□□□

□.□ □□□/□□□□Excel□□□□□□□□□Sheet□□□

□□□□□□□□□□□□□Excel□□□□□□□□□/□□□□Excel□□□□□□□

□□□□□□□□□□□□□□□□□□□□□□□□□□Excel□□□□□□□□□□□

□□□□□□□□□□□□□□□□□□□□Book1.xls□□□□□□□□□

□Sheet□□□□□□□□□□□□□□□□□□□□□□

□.□ □Excel□□□□□□□

Excel□□□□□□□□□□□□□□□□□□□□□□□

□.□ □□□□□□□□□□□□□□□□□□□

□□□□□□□□□Excel□□□□□□□□□□□□□□□□□□□□□□A1□□B1□□

□□Ch-0□

□□□Ch-7□□□□□□Ch□□□□□□□□□□□□□□□□□□□□Ch-0□□□□□Ch-7□

□□□□□□□□□□Ch On/Off□□□□□□□□□□□□□□□□□□□□□□□□

□□□□□□□□□□□□□□□□□□Ch□□□□□Excel□□□□□□□□□□□□□

□□□□□□□□□□□□□□□□□□□(□□□)□□□□□□□□□□(□□□)□□□

□□□□□□□□□

□.□ □□□□□□

□□□

□□□□□□□□□□□□□□□□□□□□□□□□□□

10□□□□□□□□□□□

□□	□□□		□□
	ELG-10	ELG-47	
□□□□□□□□	8 (Single End□□□□)		□□□□□□□□□□□□□□□□□□□□
	4 (□□□□□□)		
□□□□□□□□	20.6μs		□□□□□□□□
□□□□□□□	±10V (Single End□□□□)		□□□□□
	±1, ±1.25, ±2, ±2.5, ±4, ±5, ±10, ±20V (□□□□□□)		±20V□□□□□□□□□□□□□□□□□□□±10V□□□□
□□□□□	11 bit (Single End□□□□)	13 bit (Single End□□□□)	
	12 bit (□□□□□□)	14 bit (□□□□□□)	
□□□□□□	DC□□□□□□		
□□□□□□□□□	144 kΩ		
□□□□□□□	Max. 10kHz	Max. 47kHz	□□□□□□□□□□□□□□
□□□□□□	512 □□□		
□□□□(Max.)	138mV (Single End□□□□)		0□55℃
	138mV/±20V 84.8mV/±10V 58.4mV/±5V 53.1mV/±4V (□□□□□□) 45.1mV/±2.5V 42.5mV/±2V 38.9mV/±1.25V 37.5mV/±1V		
Digital Trigger□□	TTL□□□ □□□□□□ (High□2V□□□Low□0.8V□□)		□□□□ −0.5□5.8V
□□□□□	□2.5V		max. 1mA□□□ 0.25%
□□□□□□□□	USB 2.0 full-speed		USB □□□□□□(80mA)
□□	84 g		□□□□□□□
□□□□	National Instruments□		□□

11□□□□□□□□□

□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□USB□□
□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□

(1) DAQmx Create Channel (AI-Voltage-Basic).vi <append><B>□□□□□□□□: </B>/ai0
<B>□□□□: </B>_unnamedTask<n>

□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□▼□□□□□□□□□□□□□□□□(Dev1□□)□
□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□
□□□□□□□

(2) DAQmx Start Task.vi <append><B>□□□□: </B>_unnamedTask<n>

□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□USB□□
□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□
□□□□□□□□□□□□

(3) DAQmx Read (Analog 2D DBL NChan NSamp).vi <append><B>□□□□: </B>_unnamedTask<n>

□□□□□□□□□□USB□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□

(4) S/N□□□

□□(1)□□□□□□□□□S/N□□□□□□S/N□□□□□□□□□□□□□□
□□□S/N□□□□□□□□□□□□□□□□□□□□□□□
□□(2)□□□□□□N□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□S/N□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□▼□□□□□□
□□□□□□□□□□(Dev1□□)□□□□□□□□□□□□□□□ □□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□